

AMENDMENT TO THE CLAIMS

1. (Cancelled)
2. (Currently Amended) The method of claim [[1]] 9, wherein the base oil is a natural or synthetic oil.
3. (Currently Amended) The method of claim [[1]] 9, wherein the at least one lubricating oil additive is selected from the group consisting of antioxidants, anti-wear agents, detergents, rust inhibitors, dehazing agents, demulsifying agents, metal deactivating agents, friction modifiers, pour point depressants, antifoaming agents, co-solvents, package compatibilisers, corrosion-inhibitors, ashless dispersants, dyes, extreme pressure agents, and mixtures thereof.
4. (Currently Amended) The method of claim [[1]] 9, wherein the at least one lubricating oil additive is an ashless dispersant.
5. (Previously Presented) The method of claim 4, wherein the ashless dispersant is selected from the group consisting of polyalkylene succinic anhydrides, non-nitrogen containing derivatives of a polyalkylene succinic anhydride, a basic nitrogen compound selected from the group consisting of succinimides, carboxylic acid amides, hydrocarbyl monoamines, hydrocarbyl polyamines, Mannich bases, phosphoramides, thiophosphoramides and phosphoramides, thiazoles, triazoles, copolymers which contain a carboxylate ester with one or more additional

polar function, borate post-treated succinimides, ethylene carbonate post-treated succinimides, and mixtures thereof.

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The method of claim [[7]] 9, wherein the sludge is recovered, used engine oil.

9. (Previously Presented) A method for screening lubricating oil composition samples for dispersancy performance, under program control, comprising:

(a) providing a plurality of different lubricating oil composition samples, each sample comprising: (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of sludge;

(b) measuring the dispersancy performance of each test sample comprising measuring the kinematic viscosity of each sample at a predetermined temperature to provide corresponding dispersancy performance data results; and

(c) automatically outputting the results of step (b).

10. (Previously Presented) The method of claim 9, further comprising:
providing corresponding lubricating oil composition reference samples containing no
sludge;
measuring the kinematic viscosity of the corresponding reference samples; and
determining the percentage difference between the kinematic viscosity of the lubricating
oil composition sample and the corresponding lubricating oil composition reference sample.

11-18. (Cancelled)

19. (Currently Amended) The method of claim [[1]] 9, wherein the lubricating oil
composition samples have a volume of no more than about 50 ml.

20. (Currently Amended) The method of claim [[1]] 9, wherein the lubricating oil
composition samples have a volume of no more than about 20 ml.

21. (Currently Amended) The method of claim [[1]] 9, wherein the lubricating oil
composition samples have a volume of no more than about 15 ml.

22. (Currently Amended) The method of claim [[1]] 9, wherein the lubricating oil
composition samples have a volume of no more than about 10 ml.

23. (Currently Amended) The method of claim [[1]] 9, further comprising the step of
homogenizing the samples prior to measuring the dispersancy performance.

24. (Original) The method of claim 23, wherein the step of homogenizing the samples is performed by mechanical stirring.

25. (Cancelled)

26. (Currently Amended) The method of claim ~~[[1]]~~ 9, wherein the step (c) of automatically outputting the results of step (b) comprises converting the dispersancy performance data of step (b) into a digital signal and sending the digital signal to a microprocessor.

27. (Previously Presented) The method of claim 26, further comprising the steps of compiling the dispersancy performance data sent to the microprocessor in an electronically stored database and constructing therefrom a combinatorial lubricating oil composition library.

28. (Currently Amended) The method of claim ~~[[1]]~~ 9, wherein the at least one lubricating oil additive further comprises a diluent oil.

29. (Cancelled)

30. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein the receptacle moving means comprises a movable carriage.

31. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein the receptacle moving means comprises a robotic assembly having a movable arm for grasping and moving a selected individual receptacle.

32. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein the receptacle moving means comprises means for agitating the test receptacles.

33. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein each test receptacle has a bar code affixed to an outer surface thereof.

34. (Original) The system of claim 33, further comprising a bar code reader.

35. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein the base oil of lubricating viscosity is a natural or synthetic oil.

36. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein the at least one lubricating oil additive is selected from the group consisting of antioxidants, anti-wear agents, detergents, rust inhibitors, dehazing agents, demulsifying agents, metal deactivating agents, friction modifiers, pour point depressants, antifoaming agents, co-solvents, package compatibilisers, corrosion-inhibitors, ashless dispersants, dyes, extreme pressure agents, and mixtures thereof.

37. (Currently Amended) The system of claim ~~[[29]]~~ 39, wherein the at least one lubricating oil additive is an ashless dispersant.

38. (Cancelled)

39. (Previously Presented) A high throughput system for screening lubricant performance, under program control, comprising:

- a) a plurality of test receptacles, each receptacle containing a different lubricating oil composition sample comprising: (i) a major amount of at least one base oil of lubricating viscosity, (ii) a minor amount of at least one lubricating oil additive, and (iii) a predetermined amount of a sludge;
- b) receptacle moving means for individually positioning the test receptacles in a testing station for measurement of dispersancy performance of the respective sample; and
- c) means for measuring the dispersancy performance of the sample in the testing station comprising measuring the kinematic viscosity of each sample at a predetermined temperature to obtain dispersancy performance data associated with the sample and for transferring the dispersancy performance data to a computer controller.